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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,768	05/01/2001	Craig S. Skinner	PALM-3622. US.P	6702

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EXAMINER
CORSARO, NICK

ART UNIT	PAPER NUMBER
2684	2)

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/847,768	SKINNER ET AL.
		Examiner	Art Unit
		Nick Corsaro	2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 May 2001</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-25</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-25</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>01 May 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   Claims 1-5, 7-14, 16-22, 24, and 25 are rejected under 35 U.S.C. 103(a) as being

unpatentable over DaSilva et al. (6,445,937) in view of Gardner et al. (6,058,289).

Consider claim 1, DaSilva discloses a portable cellular phone apparatus, components

inherently applicable to a portable computer system (see col. 1 lines 5-12, where state of the art

portable phones have computing functions, and the limitations of the applicants claims are

directed to wireless communications with no computing topics). DaSilva discloses a digital

signal processor (DSP) (150, 154, figure 1) and a main processor (122) figure 1) (see col. 4 lines

8-24, and col. 2 lines 28-45, where DaSilva discusses a main processor and a power control

subsystem with processor made from a digital signal processor (DSP)). DaSilva disclose a

method for establishing a wireless connection between said portable computer system and a

wireless network, said method comprising the steps of: a) scanning a plurality of broadcast

channels used by said wireless network, wherein said step of scanning is performed under

direction of said DSP while said main processor is in a low power mode (see col. 2 lines 45-62,

col. 4 lines 49-67, col. 4 lines 23-43, col. 1 lines 5-67, col. 5 lines 1-25, col. 7 lines 12-50, and

col. 6 lines 52-67, where DaSilva discusses that the power control subsystem (DSP) monitors a

plurality of RF frequencies, from the nearest and other appropriate base stations, to see if a signal

is identified). DaSilva discloses determining whether a broadcast channel is detectable for said

wireless connection, wherein said step of determining is executed by said DSP while said main

processor remains in said low power mode; c) waking up said main processor provided a

broadcast channel detectable for said wireless connection is identified; and for said wireless

connection (see col. 4 lines 49-67, col. 1 lines 5-67, col. 5 lines 1-25, col. 4 lines 24-42, col. 6

lines 33-67, and col. 7 lines 1-60, where DaSilva discusses that the DSP is used during Idle mode

to monitor the channels, via s detector and switches to a main processor when and appropriate

signal is detected).

DaSilva discloses scanning and detecting signals from the current and surrounding base

stations (see col. 1 lines 50-67, col. 4 lines 59-67, col. 6 lines 52-67, and col. 7 lines 1-60), where

to detect a signal the signal must be acceptable. DaSilva however does not specifically disclose

determining if the channel is acceptable. Gardner teaches determining if the channel is

acceptable (see col. 6 lines 45-65, col. 10 lines 27-47).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the invention of DaSilva, and determining if the channel is acceptable, as

taught by Gardener, thus allowing more efficient use of available bandwidth by allowing less

frequent transmission of control and maintenance information, as discussed by Gardner (col. 3

lines 30-40).

Consider claim 10, DaSilva discloses a portable cellular phone apparatus, components

inherently applicable to a portable computer system (see col. 1 lines 5-12, where state of the art

portable phones have computing functions, and the limitations of the applicants claims are

directed to wireless communications with no computing topics). DaSilva discloses an inherent

bus; a wireless transceiver (120, 150, 122, figure 1) coupled to said bus; a main processor (122)

coupled to said bus; and a digital signal processor (DSP) (150) coupled to said bus (see col. 4

lines 8-55 and col. 2 lines 28-45, where DaSilva discusses a portable communication device with

several processors electrically connected to perform communications functions, therefore,

connected by several signal lines, i.e., buses). DaSilva discloses said DSP for executing a

method for establishing a wireless connection between said portable computer system and a

wireless network said method comprising the steps of: a) scanning a plurality of broadcast

channels used by said wireless network, wherein said step of scanning is performed while said

main processor is in a low power mode (see col. 2 lines 45-62, col. 4 lines 49-67, col. 4 lines 23-

43, col. 1 lines 5-67, col. 5 lines 1-25, col. 7 lines 12-50, and col. 6 lines 52-67, where DaSilva

discusses that the power control subsystem (DSP) monitors a plurality of RF frequencies, from

the nearest and other appropriate base stations, by determining available channels, and other

frequency information). DaSilva discloses determining whether a broadcast channel is

detectable for said wireless connection, wherein said step of determining is executed while said

main processor remains in said low power mode; c) waking up said main processor provided a

broadcast channel detectable for said wireless connection is identified; and

identifying to said main processor said broadcast channel detected for said wireless connection

(see col. 4 lines 49-67, col. 1 lines 5-67, col. 5 lines 1-25, col. 4 lines 24-42, col. 6 lines 33-67,

and col. 7 lines 1-60, where DaSilva discusses that the DSP is used during idle mode to monitor

the channels, and via a detector is determining if a signal is detected, and switches to a main

processor when it is necessary to go to full operation mode, and sends the appropriate RF

channel to a main processor).

DaSilva discloses scanning and detecting signals from the current and surrounding base

stations (see col. 1 lines 50-67, col. 4 lines 59-67, col. 6 lines 52-67, and col. 7 lines 1-60), where

to detect a signal the signal must be acceptable. DaSilva however does not specifically disclose

determining if the channel is acceptable. Gardner teaches determining if the channel is

acceptable (see col. 6 lines 45-65, col. 10 lines 27-47).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the invention of DaSilva, and determining if the channel is acceptable, as

taught by Gardener, thus allowing more efficient use of available bandwidth by allowing less

frequent transmission of control and maintenance information, as discussed by Gardner (col. 3

lines 30-40)..

Consider claim 19, DaSilva discloses a portable cellular phone apparatus, components

inherently applicable to a portable computer system (see col. 1 lines 5-12, where state of the art

portable phones have computing functions, and the limitations of the applicants claims are

directed to wireless communications with no computing topics). DaSilva discloses a digital

signal processor (DSP) and a main processor (see col. 4 lines 8-24, and col. 2 lines 28-45, where

DaSilva discusses a main processor and a power control subsystem with processor made from a

digital signal processor (DSP)). DaSilva discloses a method for establishing a wireless

connection between said portable computer system and a wireless network, said method

comprising the steps of: a) scanning a plurality of broadcast channels used by said wireless

network, wherein said step of scanning is performed under direction of said

DSP while said main processor is in a low power mode and wherein said step of scanning is

automatically initiated in response to a triggering event (see col. 2 lines 45-62, col. 4 lines 49-

67, col. 4 lines 23-43, col. 1 lines 5-67, col. 5 lines 1-25, col. 7 lines 12-50, and col. 6 lines 52-67, where DaSilva discusses that the power control subsystem (DSP) monitors a plurality of RF frequencies, from the nearest and other appropriate base stations, by determining available channels, and other frequency information). DaSilva discloses said DSP comparing to a threshold value a measure of comparison of each signal received over said plurality of broadcast channels, wherein said threshold is for defining a signal detectable for said wireless connection (see col. 4 lines 49-67, col. 1 lines 5-67, col. 5 lines 1-25, col. 4 lines 24-42, col. 6 lines 33-67, and col. 7 lines 1-60, where DaSilva discusses that a detector is used to check the channels for an indication of signal). DaSilva discloses said DSP waking up said main processor provided a broadcast channel detectable for said wireless connection is identified, and otherwise said DSP repeating said steps a) and b) until a broadcast channel detectable for said wireless connection is identified; and d) said DSP identifying to said main processor said broadcast channel acceptable for said wireless connection (see col. 4 lines 49-67, col. 1 lines 5-67, col. 5 lines 1-25, col. 4 lines 24-42, col. 6 lines 33-67, and col. 7 lines 1-60, where DaSilva discusses that the DSP is used during idle mode to monitor the channels, and switches to a main processor when it is necessary to go to full operation mode, and sends the appropriate RF channel to a main processor).

DaSilva discloses scanning and detecting signals from the current and surrounding base stations (see col. 1 lines 50-67, col. 4 lines 59-67, col. 6 lines 52-67, and col. 7 lines 1-60), where to detect a signal the signal must be acceptable. DaSilva however does not specifically disclose comparing to a threshold value a measure of signal strength of each signal received over said plurality of broadcast channels, wherein said threshold is for defining a signal strength acceptable for said wireless connection. Gardner teaches comparing to a threshold value a

measure of signal strength of each signal received over said plurality of broadcast channels, wherein said threshold is for defining a signal strength acceptable for said wireless connection (see col. 6 lines 45-65, col. 10 lines 27-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of DaSilva, and compare to a threshold value a measure of signal strength of each signal received over said plurality of broadcast channels, wherein said threshold is for defining a signal strength acceptable for said wireless connection, as taught by Gardener, thus allowing more efficient use of available bandwidth by allowing less frequent transmission of control and maintenance information, as discussed by Gardner (col. 3 lines 30-40)..

Consider claims 2-5, 11-14, and 20-22, DaSilva does not specifically disclose comparing to a threshold a measure of signal strength of a signal received over said broadcast channel, wherein said threshold is for defining a signal strength acceptable for said wireless connection. Gardner teaches comparing to a threshold a measure of signal strength of a signal received over said broadcast channel, wherein said threshold is for defining a signal strength acceptable for said wireless connection (see col. 10 lines 27-67 and col. 12 lines 1-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of DaSilva, and compare to a threshold a measure of signal strength of a signal received over said broadcast channel, wherein said threshold is for defining a signal strength acceptable for said wireless connection, as taught by Gardener, thus allowing more efficient use of available bandwidth by allowing less frequent transmission of control and maintenance information, as discussed by Gardner (col. 3 lines 30-40).

Consider claims 7-9, 16-18, 24, and 25, DaSilva discloses cyclical communications protocol for establishing the connection. DaSilva however does not specifically disclose the cyclical nature with regard to signal level. Gardner teaches disclose the cyclical nature with regard to signal level (see col. 10 lines 27-67, and col. 11 lines 1-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of DaSilva, and have the cyclical nature applied to signal level, , as taught by Gardener, thus allowing more efficient use of available bandwidth by allowing less frequent transmission of control and maintenance information, as discussed by Gardner (col. 3 lines 30-40).

3.   Claims 6, 15, and 23, are rejected under 35 U.S.C. 103(a) as being unpatentable over DaSilva in view of Gardner as applied to claims 1, 10, and 19 above, and further in view of Nelson et al. (6,311,282).

Consider claims 6, 15, and 23, DaSilva and Gardner do not specifically disclose Mobitex. Nelson discloses Mobitex (see col. 4 lines 30-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of DaSilva and Gardner, and have Mobitex, as taught by Nelson, thus allowing the method and apparatus to be compatible with a Industry standard, for communication and processing.

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(6,684,083), Harimoto discloses power saving mode.

Any inquiry concerning this communication should be directed to Nick Corsaro at

telephone number (703) 306-5616.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nay Maung, can be reached at (703) 308-7745. Any response to this action should

be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington,

VA, Sixth, Floor (Receptionist). Any inquiry of a general nature or relating to the status of this

application or proceeding should be directed to the Technology Center 2600 customer Service

Office whose telephone number is (703) 306-0377.

Nick Corsaro

Primary Examiner